Patent Docket P1819R1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	Group Art Unit: 1645
James C. Marsters, Jr. et al. (AS AMENDED)	Examiner: Arun K. Chakrabarti
Serial No.: 09/823,648	
Filed: March 30, 2001	EXPRESS MAIL LABEL NO.: EL 809 447 631 US
For: COMPOSITIONS AND METHODS FOR DETECTING AND QUANTIFYING GENE EXPRESSION	DATE OF DEPOSIT: February 12, 2003

DECLARATION UNDER 37 CFR §1.131

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

We, Victoria Smith, James C. Marsters, Jr. and Edward P. Robbie, do hereby declare and say as follows:

1. We are inventors of the subject matter of the above-identified patent application. All work described hereinafter was performed by us or on our behalf in the Unites States of America.

2. Prior to April 29, 1999, we conceived of and reduced to practice a microarray comprising a surface silanized with a silane in toluene in the absence of acetone or an alcohol, a target molecule, and optionally a linker, wherein the target molecule is attached to the surface via the silane or, where a linker is present, via the linker; and a method of making a microarray comprising silanizing the surface with a silane in toluene in the absence of acetone or an alcohol.

3. Evidence of the reduction to practice of the claimed invention is set forth in the exhibit attached to this declaration which represents excerpts from our computer print-outs (with dates obscured) regarding target deposition onto microarrays prepared as indicated.

4. Exhibit A provides a description of the method of preparing a microarray by silanizing a glass slide in toluene and in the absence of acetone or an alcohol, and also notes subsequent wash procedures including water and/or alcohol. According to Exhihit A, substantially dry toluene was used as the solvent for the silanizing agent, amino silane. Acetone and alcohol were not used during the silanizing reaction. The silanization reaction carried out in toluene and in the absence of acetone or alcohol provided reduced fluorescence background during detection, rendering a superior microarray substrate to one silanized in the presence of acetone or an alcohol. The experimental work in Exhibit A was completed prior to April 29, 1999.

We declare further that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 02/12/03 Victoria Smith

Date: 02/12/03 James C. Marsters, Jr.

Date: 02/12/03 Edward P. Robbie

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# test array: 9 (old)samples with Cy3 dCTP, 0, 1, or 2 C6 amino
# slides: in 10% silane in toluene, water and solvent washes, PDITC
# DNA samples- SSC, NaBorate-NaCl pH 9, SSC-NaCNBH3 pH 12
# [redacted]
# "red print tip"


makeSampleList 9 9 9
arrayMultiSamples 12000 2200 4 1 100
arrayMultiSamples 12000 2400 4 1 100
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Exhibit A.

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